

## REMARKS

### (A) STATUS OF THE APPLICATION

Applicants wish to thank the Examiner for his clear explanation of the rejections in the Final Office Action dated August 4, 2005.

#### (I) DISPOSITION OF CLAIMS

- (i) Claims 1-10 have been canceled.
- (ii) Claim 11-16 are pending in the application.
- (iii) Claims 15-16 have been rejected under 35 U.S.C. § 102.
- (iv) Claims 11-16 have been rejected under 35 U.S. C. § 103.

#### (II) APPLICANTS' ACTION

- (i) Claim 11 has been amended to correct a typographical error, namely removing the word "a." This does not change the meaning or scope of the claim.
- (ii) Claim 12 has been amended to correct a typographical error, namely the letter "g" which has been capitalized to "G." This does not change the meaning or scope of the claim.
- (iii) Applicants respond to the propriety of the Office Action being final.
- (iv) Applicants have canceled Claims 15 and 16.
- (v) Applicants respond to the rejection of Claims 11-16.

### (B) PROPRIETY OF FINALITY OF THE OFFICE ACTION

Applicants respectfully contend that this is not a proper Final Office Action for two reasons. The Examiner's remarks concerning the rejection under 35 U.S.C. § 102(a) are conclusory, and do not discuss Applicants' response to the first office action and why that response did not overcome the rejection (MPEP § 706.07). Second, the Examiner has "introduce[d] a new ground of rejection [U.S. Patent 4,906,754 to Klabunde] that is [not] necessitated by [A]pplicants["] amendment of the claims. . ." (MPEP § 706.07(a)).

Applicants therefore request the Examiner for reconsideration and withdrawal of the Final Rejection.

**(C) RESPONSE TO REJECTION UNDER 35 U.S.C. § 102**

**U.S. PATENT NO. 6,103,658 TO MACKENZIE, ET AL.**

Claims 15-16 have been rejected under 35 U.S.C. § 102(a) as anticipated by U.S. Patent No. 6,103,658 to Mackenzie, *et al.* In response, Applicants have canceled Claims 15 and 16.

**(D) RESPONSE TO REJECTION UNDER 35 U.S.C. § 103**

**U.S. PATENT NO. 4,906,754 TO KLABUNDE**

Claims 11-16 have been rejected as obvious under 35 U.S.C. § 103(a) over U.S. Patent No. 4,906,754 to Klabunde (hereinafter "Klabunde"). The Examiner contends the only difference in the catalysts of the present invention and those disclosed in Klabunde is the present invention teaches a saturated bridge in the ligand while Klabunde teaches a  $\text{--C=C--}$  olefinic bridge in the ligand. The Examiner further contends that these bridges are functionally equivalent to one of ordinary skill in the art.

Applicants respectfully disagree with the notion that a saturated bridge and a  $\text{--C=C--}$  olefinic bridge are functionally equivalent. Because such groupings are not equivalent, one skilled in the art would not be able to derive any suggestion or motivation from Klabunde for using a saturated bridge. Applicants cite below, several key differences between a saturated bridge and a  $\text{--C=C--}$  olefinic bridge that would estop a person of ordinary skill in the art from deriving any suggestion or motivation to functionally equate the two types of bridges.

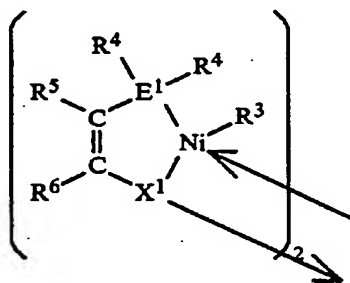
First, the groups about said saturated bridge are free to rotate. On the other hand, groups about the  $\text{--C=C--}$  olefinic bridge are not.

Second, the olefinic bridge must be *cis*-substituted in order to be a bidentate ligand. However, the freely rotating saturated bridge does not form such isomers.

Thirdly, and more importantly, the steric effect of the  $\text{--C=C--}$  olefinic bridge versus the saturated bridge may change their ability to be coordinated and/or be an active catalyst ligand.

Fourth, the electronic effect of the  $\text{--C=C--}$  olefinic bond is twofold: (i) it can conjugate groups bound to the olefinic bond and (ii) the  $\text{--C=C--}$  olefinic bond is electronically more electron-withdrawing than single bonds, thereby again affecting the formation of the complex and/or its usefulness as a polymerization catalyst.

Furthermore, there is another important difference between Klabunde and the present claims. In Klabunde, a complex is given by the following structure (Claim 1):



In this formula, E<sup>1</sup> is P, As or Sb, and X<sup>1</sup> is O or S. Simple bond counting shows that X<sup>1</sup> must have a negative charge. R<sup>3</sup> also has a negative charge. Both negative charges combine to form a neutral compound with the Ni(II) atom. In other words, the bidentate ligand in Klabunde is a monoanion. To the contrary, in the present application, simple charge counting of structure (I) or the complex in structure (IV) on page 7 of the Specification shows that the bidentate ligand in the present claims is neutral (not charged). Thus, electronically, Klabunde's ligand and the ligand of the present invention are clearly distinct. A person of ordinary skill in the art would be highly uncertain, at best, if he attempted to determine from the Klabunde disclosure whether any kind of uncharged ligand would be useful as a polymerization catalyst. Further, Klabunde does not even suggest the use of a neutral bidentate ligand.

Therefore, Applicants respectfully believe that equating these two types of bridges is hindsight reconstruction, that is with knowledge of Applicants' invention,

and that a *prima facie* case of obviousness has not been established because a person of ordinary skill in the art would not equate such groups. Hence, Klabunde does not render Claims 11-16 obvious.

## CONCLUSION

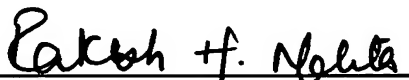
In view of the above remarks, Applicants respectfully submit that stated grounds of rejection have been properly traversed, accommodated, or rendered moot and that a complete response has been made to the Final Office Action mailed on August 4, 2005.

Therefore, Applicants believe that the application stands in condition for allowance with withdrawal of all grounds of rejection. A Notice of Allowance is respectfully solicited. If the Examiner has questions regarding the application or the contents of this response, the Examiner is invited to contact the undersigned at the number provided.

Should there be a fee due which is not accounted for, please charge such fee to Deposit Account No. 04-1928.

Respectfully Submitted,

DATED: September 23, 2005

  
RAKESH H. MEHTA, ESQUIRE  
ATTORNEY FOR APPLICANTS  
REGISTRATION NO.: 50,224  
PHONE: 302-984-6089  
FAX: 302-658-1192